

III. REMARKS

1. Claims 1 through 20 remain in the application. Claims 21-28 are new.

2. Applicants respectfully submit that claims 1-7, 11, and 16 are patentable over Thornton (US 5,847,336).

Thornton fails to disclose that an illumination means comprise light sources that are semiconductor light emitting devices made of layered foil structures for dynamically illuminating individual keys or key groups of a keypad in such a way that the illumination means is reconfigurable for different kinds of illumination effects. These features are recited in claims 1 and 16.

Thornton differs from the present invention in that it is only related to LEDs. For example, the layered foil structures recited in the claims of the present invention are missing in the keypad illumination of Thornton, and the functionalities of the solution of Thornton are limited.

Starting with Thornton, one skilled in the art would still be faced with the problems of increasing the dynamics and providing more effects for the portable device. The present invention solves this problem in that the illumination means comprise light sources that are semiconductor light-emitting devices made of layered foil structures. This allows for dynamically illuminating individual keys or key groups of a keypad such that the illumination means is reconfigurable for different kind of illumination effects.

A skilled person, having the above problems in mind, would find absolutely no hint of a solution in the cited references. This equally applies to the admitted prior art, as OLED's as such have existed.

The admitted prior art discloses only a layered foil structure or OLED as such. However, this is disclosed in absolutely separation of the context of the present invention. In particular, APA does not disclose that the layered foil structures are used for portable device's keypad illumination, not to mention that they would be disclosed for dynamically illuminating individual keys or key groups of said keypad in such a way that the illumination means is reconfigurable for different kind of illumination effects.

Thus, OLEDs exist, but in total isolation from the present invention and not in the form as claimed.

One skilled in the art would not be motivated to combine the cited reference Thornton with the APA because they do not relate to and would not motivate one illuminate a keypad by dynamically illuminating individual keys or key groups of said keypad in such a way that the illumination means is reconfigurable for different kind of illumination effects.

For these reasons, a skilled person would find no motivation or suggestion to combine Thornton and the admitted prior art to arrive at the present invention. Also, the Office Action fails to recognize the improved functionality of the keypad and the portable device which is due to the OLEDs.

The present invention utilizes a layered foil structure for keypad illumination of a portable device which provides more

flexibility, functionality, and improved operation of the portable device. Applicant's solutions for improving the functionality of the portable device and keypad is not tied to keys or display but layered foil structures. Thornton, the APA, and any combination of the other cited reference does not clearly motivate and provide reasonable enough instruct for a skilled person to achieve this kind of more advanced solution. To the contrary, Thornton merely provides LED based solutions, and the APA discloses OLEDs but in a separate context and in a different technical field.

Applicants respectfully submit that it would not be obvious to substitute OLED's for the conventional LED's of Thornton.

At least for these reasons, Applicants respectfully submit that claims 1-7, 11, and 16 are patentable over Thornton.

3. Claims 8 and 9 are patentable over the combination of Thornton and JP 11-126047.

JP 11-126047 fails to disclose or suggest light sources that are semiconductor light emitting devices made of layered foil structures for dynamically illuminating individual keys or key groups of a keypad in such a way that the illumination means is reconfigurable for different kinds of illumination effects, as recited by the independent claims of the present invention.

4. Claim 10 is patentable over the combination of Thornton and JP 11-126047, further in view of JP 11-327509.

Like the other cited references, JP 11-327509 fails to disclose or suggest light sources that are semiconductor light emitting devices made of layered foil structures for dynamically illuminating individual keys or key groups of a keypad in such a

way that the illumination means is reconfigurable for different kinds of illumination effects.

5. Claims 12-15 are patentable over the combination of Thornton and JP 08-148056.

JP 08-148056 fails to disclose or suggest light sources that are semiconductor light emitting devices made of layered foil structures for dynamically illuminating individual keys or key groups of a keypad in such a way that the illumination means is reconfigurable for different kinds of illumination effects.

6. Claim 17 is patentable over the combination of Thornton and JP 08-265413 because neither reference discloses or suggests light sources that are semiconductor light emitting devices made of layered foil structures for dynamically illuminating individual keys or key groups of a keypad in such a way that the illumination means is reconfigurable for different kinds of illumination effects.

7. Claim 18 is patentable over the combination of Thornton and JP 06-274261 because neither reference discloses or suggests light sources that are semiconductor light emitting devices made of layered foil structures for dynamically illuminating individual keys or key groups of a keypad in such a way that the illumination means is reconfigurable for different kinds of illumination effects.

8. Claims 19-20 are patentable over the combination of Thornton and JP 11-88948 because, like the other cited combinations of references, this combination fails to disclose or suggest light sources that are semiconductor light emitting devices made of layered foil structures for dynamically

illuminating individual keys or key groups of a keypad in such a way that the illumination means is reconfigurable for different kinds of illumination effects, as recited by the independent claims of the present invention.

9. Claims 21-28 are new and are directed to a keypad for a portable electronic device that includes a mechanical support structure, and a plurality of keys. Significantly, the keypad also includes a layer that further includes a switching function and a layered foil illumination structure for each of the keys, integrated together.

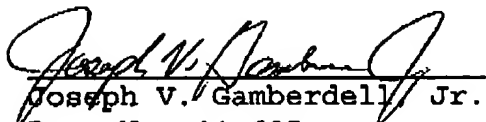
Applicants find no disclosure in the cited art regarding an integrated switching function and layered foil illumination structure for each key. At least for this reason, Applicants respectfully submit that claims 21-28 are patentable.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

* Please charge Deposit Account 16-1350 in the amount of \$144.00 for extra claims fees. *

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Respectfully submitted,


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